

What Is Claimed Is:

1. An isolated nucleic acid molecule comprising a polynucleotide having a nucleotide sequence at least 95% identical to a sequence selected from the group consisting of:

5 (a) a nucleotide sequence encoding a polypeptide comprising amino acids from about -20 to about 129 in SEQ ID NO:2;

(b) a nucleotide sequence encoding a polypeptide comprising amino acids from about -19 to about 129 in SEQ ID NO:2;

10 (c) a nucleotide sequence encoding a polypeptide comprising amino acids from about 1 to about 129 in SEQ ID NO:2;

(d) a nucleotide sequence encoding a polypeptide having the amino acid sequence encoded by the cDNA clone contained in ATCC Deposit No. 97519;

15 (e) a nucleotide sequence encoding the mature chemokine β -15 polypeptide having the amino acid sequence encoded by the cDNA clone contained in ATCC Deposit No. 97519; and

(f) a nucleotide sequence complementary to any of the nucleotide sequences in (a), (b), (c), (d), or (e).

20 2. The nucleic acid molecule of claim 1 wherein said polynucleotide has the complete nucleotide sequence in SEQ ID NO:1.

3. The nucleic acid molecule of claim 1 wherein said polynucleotide has the nucleotide sequence in SEQ ID NO:1 encoding the chemokine β -15 polypeptide having the complete amino acid sequence in SEQ ID NO:2.

25 4. The nucleic acid molecule of claim 1 wherein said polynucleotide has the nucleotide sequence in SEQ ID NO:1 encoding the mature chemokine β -15 polypeptide having the amino acid sequence in SEQ ID NO:2.

03674450 061697

7

5. The nucleic acid molecule of claim 1 wherein said polynucleotide has the complete nucleotide sequence of the cDNA clone contained in ATCC Deposit No. 97519.

6. The nucleic acid molecule of claim 1 wherein said polynucleotide has the nucleotide sequence encoding the chemokine β -15 polypeptide having the complete amino acid sequence encoded by the cDNA clone contained in ATCC Deposit No. 97519.

7. The nucleic acid molecule of claim 1 wherein said polynucleotide has the nucleotide sequence encoding the mature chemokine β -15 polypeptide having the amino acid sequence encoded by the cDNA clone contained in ATCC Deposit No. 97519.

8. An isolated nucleic acid molecule comprising a polynucleotide which hybridizes under stringent hybridization conditions to a polynucleotide having a nucleotide sequence identical to a nucleotide sequence in (a), (b), (c), (d), (e), or (f) of claim 1 wherein said polynucleotide which hybridizes does not hybridize under stringent hybridization conditions to a polynucleotide having a nucleotide sequence consisting of only A residues or of only T residues.

9. An isolated nucleic acid molecule comprising a polynucleotide which encodes the amino acid sequence of an epitope-bearing portion of a chemokine β -15 polypeptide having an amino acid sequence in (a), (b), (c), (d), or (e) of claim 1.

10. A method for making a recombinant vector comprising inserting an isolated nucleic acid molecule of claim 1 into a vector.

11. A recombinant vector produced by the method of claim 10.

36
11 into

13. 38

12.37

14. ³⁹

38 unde

[illegible]

- polypeptide having the amino/acid sequence encoded by the cDNA clone contained in ATCC Deposit No. 97519;

- (f) the amino acid sequence of an epitope-bearing portion of any one of the polypeptides of (a), (b), (c), (d), or (e).

16. An isolated antibody that binds specifically to a chemokine β -15 polypeptide of claim 15.

17. An isolated nucleic acid molecule comprising a polynucleotide encoding a chemokine β -15 polypeptide wherein, except for at least one

conservative amino acid substitution, said polypeptide has a sequence selected from the group consisting of:

(a) a nucleotide sequence encoding a polypeptide comprising amino acids from about -20 to about 129 in SEQ ID NO:2;

(b) a nucleotide sequence encoding a polypeptide comprising amino acids from about -19 to about 129 in SEQ ID NO:2;

(c) a nucleotide sequence encoding a polypeptide comprising amino acids from about 1 to about 129 in SEQ ID NO:2;

(d) a nucleotide sequence encoding a polypeptide having the amino acid sequence encoded by the cDNA clone contained in ATCC Deposit No. 97519;

(e) a nucleotide sequence encoding the mature chemokine β -15 polypeptide having the amino acid sequence encoded by the cDNA clone contained in ATCC Deposit No. 97519; and

(f) a nucleotide sequence complementary to any of the nucleotide sequences in (a), (b), (c), (d), or (e).

18. An isolated chemokine β -15 polypeptide wherein, except for at least one conservative amino acid substitution, said polypeptide has a sequence selected from the group consisting of:

(a) amino acids from about -20 to about 129 in SEQ ID NO:2;

(b) amino acids from about -19 to about 129 in SEQ ID NO:2;

(c) amino acids from about 1 to about 129 in SEQ ID NO:2;

(d) the amino acid sequence of the chemokine β -15 polypeptide having the amino acid sequence encoded by the cDNA clone contained in ATCC Deposit No. 97519;

(e) the amino acid sequence of the mature chemokine β -15 polypeptide having the amino acid sequence encoded by the cDNA clone contained in ATCC Deposit No. 97519; and

(f) the amino acid sequence of an epitope-bearing portion of any one of the polypeptides of (a), (b), (c), (d), or (e).

5

10

- (a) measuring chemokine β -15 gene expression level in cells or body fluid of said individual;
- (b) comparing the chemokine β -15 gene expression level of said individual with a standard chemokine β -15 gene expression level, whereby an increase or decrease in the chemokine β -15 gene expression level of said individual compared to said standard expression level is indicative of a thymus disorder.